

PATENT ABSTRACTS OF JAPAN

(11)Publication number : **2002-208886**

(43)Date of publication of application : **26.07.2002**

(51)Int.Cl.

H04B 7/26

G06F 11/00

H04B 1/16

H04M 11/00

(21)Application number : **2001-002925**

(71)Applicant : **KENWOOD CORP**

(22)Date of filing : **10.01.2001**

(72)Inventor : MURAYAMA NORIO

(54) PORTABLE TERMINAL EQUIPMENT, STORAGE DATA UPDATING METHOD AND FIRMWARE-UPDATING METHOD

(57)Abstract:

PROBLEM TO BE SOLVED: To securely update an internal program, such firmware.

SOLUTION: When a first CPU 10 cannot receive an ACK signal returned for the purpose of informing confirmation from a second CPU 11, while data are transferred in a system fitted to a program for update, which the second CPU 11 performs, it transmits an output switching instruction to a protocol converter 15. The protocol converter 15 switches the output destination of serial data in a serial analysis part 16 to a protocol conversion processing part 17 from a serial line 18. When the protocol conversion processing part 17 receives serial data from the serial analysis part 16, it extracts a signal for transferring data to the second CPU 11 and transmits it. As a result, data for rewriting a storage content in a non-volatile memory 14 can be transferred in a system which is suitable for boundary scanning.

